# NASA ADVANCED PLANNING & INTEGRATION OFFICE (APIO) REQUEST FOR INFORMATION (RFI)

Synopsis - Nov 02, 2004

### **General Information**

Solicitation Number: GC-04-06

Posted Date: Nov 02, 2004

FedBizOpps Posted

Date:

Nov 02, 2004

Original Response

Date:

Nov 16, 2004

Current Response

Date:

Nov 16, 2004

Classification Code: A -- Research and Development

NAICS Code: 541710 - Research and Development in the Physical,

Engineering, and Life Sciences

# **Description**

CONTRACTING OFFICE ADDRESS: National Aeronautics and Space Administration (NASA), Advanced Planning and Integration Office (APIO), NASA Headquarters, Code FA, 300 E Street S.W., Washington D.C. 20546-0001.

INTRODUCTION: NASA is currently preparing a set of high-level national roadmaps that will form the foundation of the Agency's strategic plan. "Strategic Roadmaps" will explore options and establish pathways for achievement of NASA's strategic objectives. "Capability Roadmaps" will recommend approaches for providing certain technical capabilities judged to be critical to NASA's future programs. The purpose of this request is to solicit contributions to the roadmap development process, with the goal of ensuring that the best and widest possible set of ideas is considered in the formulation of NASA's plans for the future.

The information collected via this RFI will be supplied to Strategic and Capability Roadmap teams to inform their deliberations and discussions. It is anticipated that the final roadmaps and the integrated architecture may ultimately contribute to NASA strategic investment decisions, but this RFI in no way constitutes a promise or expectation of future funding opportunities from NASA. The requested information can be submitted to NASA in any of three different ways:

- 1. Participation in a NASA Capability Roadmap Public Workshop to be held on November 30, 2004.
- 2. Submission of capability concept papers for inclusion in the workshop documentation.

3. Submission of strategic concept papers that will be included in the Strategic Roadmap development process but that will not be associated with a general workshop.

NASA's key strategic and capability focus areas are the topics of the individual roadmaps. Roadmap teams will be formed to address each of these topic areas. The teams will be composed of representatives from NASA, JPL, other government agencies, academia, and private industry. Therefore, DO NOT SUBMIT PROPRIETARY OR COMPETITION SENSITIVE INFORMATION in response to this RFI.

SUMMARY: With this RFI, NASA is seeking information regarding strategies, mission concepts, investigations, capabilities, and technologies that may enable or enhance NASA's ability to carry out its mission for the nation. No procurement is planned as a result of this RFI, although responses may be considered in formulating NASA's future strategic investments and other decisions.

White papers (no longer than two pages) are invited that address NASA strategic objectives and capability needs. Papers that address other important aspects of NASA planning in a manner consistent with the information requested are also welcome. Innovative approaches including novel mission strategies and capabilities concepts are especially encouraged, but these must be consistent with reasonably expected technical advances and budgetary constraints.

It is emphasized that the requested information is for preliminary planning purposes only and does not constitute a commitment, explicit or implied, that the Government will solicit any related procurement from responders or any other groups or individuals in the future. The Government will not be responsible for any costs incurred by respondents in furnishing the requested information. NO AWARDS WILL BE GRANTED AS A DIRECT RESULT OF THIS RFI.

#### **RFI GUIDELINES**

This RFI solicits information only, in two categories:

- · Capabilities Focus Areas
- · Strategic Objectives Focus Areas.

Capabilities Focus Areas: Groups or individuals interested in describing existing or proposed capabilities or technologies to NASA are encouraged to provide rationale and technical details in a white paper format (no longer than two pages). Capabilities should relate to one or more of the 15 key capability focus areas shown below:

1.High-Energy Power and Propulsion 2. In-Space Transportation 3. Advanced Telescopes and Observatories 4. Communication and Navigation 5. Robotic Access to Planetary Surfaces 6. Human Planetary Landing Systems 7. Human

Health and Support Systems 8. Human Exploration Systems and Mobility 9. Autonomous Systems and Robotics 10. Transformational Spaceport/Range 11. Scientific Instruments/Sensors 12. In Situ Resource Utilization 13. Advanced Modeling, Simulation, Analysis 14. Systems Engineering Cost/Risk Analysis 15. Nanotechnology

Additional information on the planned content of each capability area can be found on the website: <a href="http://research.hq.nasa.gov/code">http://research.hq.nasa.gov/code</a> a/apio/index.cfm

In addition to white paper submission, groups or individuals are further invited to give oral and/or written comments at a NASA Capability Roadmap Public Workshop meeting (at the responder's own expense). Those attending the workshop will have the opportunity, during an open dialogue session, to provide roadmap teams with feedback/suggestions related to the 15 capability areas. During the open dialogue, attendees are welcome to briefly summarize their white papers, with no expectation of confidentiality. Submission of white papers prior to the workshop is strongly encouraged but is not required. The workshop will be held on November 30, 2004 in Washington D.C. The registration and white paper submittal deadline is November 16, 2004. You must register in advance and receive a confirmation of registration in order to attend the Public Workshop (see instructions below). After registration you will receive further details on workshop time and specific location.

Strategic Focus Areas: Groups or individuals interested in providing input to the Strategic Roadmap teams are encouraged to describe their ideas in a white paper format (no longer than two pages) by December 10, 2004. See below for instructions on white paper submission. Strategic white papers should relate to one or more of the 12 key strategic focus areas shown below (maximum of two focus areas per paper):

1.Robotic and human lunar expeditions. 2. Sustained, long-term robotic and human exploration of Mars. 3. Robotic exploration across the solar system. 4. Advanced telescope searches for Earth-like planets and habitable environments. 5. Development of an exploration transportation system. 6. Completion of the International Space Station and focusing its use on supporting space exploration goals. 7. Exploration of the Universe. 8. Exploration of the dynamic Earth system. 9. Exploration of the Sun-Earth system. 10. Advanced aeronautical technologies for next-generation aviation systems. 11. Using NASA missions to inspire, motivate, and educate. 12. Utilization of nuclear systems for the advancement of space science and exploration.

Additional detail on the strategic focus areas can be found on the website: <a href="http://research.hq.nasa.gov/code\_a/apio/index.cfm">http://research.hq.nasa.gov/code\_a/apio/index.cfm</a> Strategic white papers will be reviewed by the NASA Advanced Planning and Integration Office. Compelling submissions will be provided to the appropriate strategic roadmap team for further consideration and may elicit a request for additional written or oral information. Any such additional information must be provided at the expense of the submitter and without any expectation that a procurement or funding opportunity will result.

The information will be supplied solely to inform the strategic roadmap teams and for possible inclusion in their final roadmap team report.

INSTRUCTIONS: The following web site must be used for submission of white papers and for registration for the Capability Roadmap Public Workshop: <a href="http://research.hq.nasa.gov/code">http://research.hq.nasa.gov/code</a> a/apio/index.cfm

All documents must be delivered to this web site electronically using Microsoft Word or Adobe Acrobat PDF files. All documents should be formatted for a standard 8.5x11 inch page size with a 12-point font and standard margins. Responses are due no later than November 16, 2004 for the Capabilities Focus Areas and December 10, 2004 for the Strategic Focus Areas. Papers should be identified with one or a maximum of two of the Strategic or Capability Focus Areas; the web site provides a means for making these designations. Each submission will receive electronic notification of successful upload.

Any information obtained as a result of this RFI is intended to be used by the Government on a non-attribution basis for roadmap development. Providing data/information that is limited or restricted for use by the Government for that purpose would be of very little value and such restricted/limited data/information is not solicited. By submitting information in response to this RFI, submitters of such information imply consent to the release and dissemination of submitted information to any Government or non-Government entity to which NASA elects to release and disseminate the information. Submissions will be provided to roadmap teams comprised of personnel from NASA HQ, NASA Centers, Jet Propulsion Lab, other Government agencies, industry and academia. As such, to the extent that any information submitted in response to this RFI is marked as or construed to be proprietary or business-sensitive, submitters are hereby notified (a) about the potential that such information may be disclosed to third parties and (b) that submission of information in response to this RFI constitutes consent to such handling and disclosure of submitted information. Neither the Government nor any entity acting on its behalf will assume any liability for the disclosure, use, or reproduction of any data or information submitted in response to this RFI.

This RFI is being used to obtain information for planning purposes only and the Government does not presently intend to award a contract at this time. As stipulated in FAR 15.201(e), responses to this notice are not considered offers and cannot be accepted by the Government to form a binding contract. This RFI is subject to FAR 52.215-3.

## NASA POINT OF CONTACT

(For all questions and comments E-mail is preferred)

Mr. Rob Mueller NASA Advanced Planning and Integration Office (APIO) 4800 Oak Grove Drive, Mail Stop 301-422 Pasadena, CA 91109-8099 Phone: (818) 393-1336; Fax: (818) 393-2699 Email: Rob.Mueller@nasa.gov